Minitab Command Summary

Basics:

- Projects contain Session window output, graphs, and worksheets.
- Worksheets contain all your data: columns, constants, and matrices.
- Save Project/Worksheet Data by clicking window and File > Save Project/Worksheet as: _____
- Session Window has results and comments
- Save Session by clicking File > Save Session Window as: _____
- Save Graph by clicking File > Save Graph as: _____

Minitab Applications:

- **Use Stat>Basic Statistics> 1-Sample t and 2-Sample t for Specification Confidence and Pairwise Comparisons**

- **For Single Factor use: One-Way ANOVA**
  - ANOVA Table
  - Main Effects, Confidence Intervals, Box Plots

- **For Two or More Factors use: General Linear Model**
  - Data Column is Response Variable (C1)
  - Factors Entered: A B C D (etc.) or C2 C3 C4
  - Interactions Entered: C2*C3 C3*C4 C2*C3*C4 (etc.) (To include in ANOVA Table statistics)
  - Interaction Plots

- **Use DOE for 2^n and Fractional Designs**

Minitab Commands:

- **One Sample t (for Specification Confidence)**
  Stat > Basic Statistics > 1-Sample t Choose: Test Mean ____ Alternative _____

- **Two Sample t (for Pairwise Comparisons)**
  Stat > Basic Statistics > 2-Sample t
  Choose: Data in Separate Columns or Single Column (two variables in column)

- **1 Proportion**
  Stat > Basic Statistics > 1 Proportion: Options: Binomial or Normal
  Binomial is more exact and conservative

- **2 Proportion**
  Stat > Basic Statistics > 2 Proportions: Summarized or sample data

- **One Way or Single Factor Analysis**
  Stat > ANOVA > OneWay Choose: Graphs

- **Fisher Multiple Comparisons**
  Stat > ANOVA > OneWay > Comparisons > Fisher's (Choose Individual Error Rate)
  Note: Simultaneous Confidence Level on output

- **ANOVA (Multi-factor)**
  Stat >ANOVA > GLM
  Choose: Responses (Data Column), Model (Factors), Graph (Histogram, Normal Plot), Results (ANOVA Table)

- **Normal Probability Plot**
  Graph > Probability Plot > Normal. Or as above under ANOVA

- **Confidence Intervals**
  Stat > ANOVA > Interval Plot

- **Box Plot**
  Graph > Box Plot

- **Kruskal-Wallis**
  Non-Parametrics > Kruskal-Wallis

- **Main Effects (Means Plot)**
  Stat > ANOVA > Main Effects Plot

- **Interactions**
  Stat > ANOVA > Interactions
  List Factors or check "Display Full Interaction Plot Matrix"

- **Analysis of Means Table**
  Stat > ANOVA > Analysis of Means > 'Include Means Table'

- **Design of Experiments (DOE)**
  Stat > DOE > Factorial > Create Factorial Design

- **Pareto Chart**
  Stat > DOE > Factorial > Analyze Factorial Design > Graph > Pareto

- **Chi-Square Test for 2x2 Contingency Table**
  Stat > Tables > Cross-Tabulation and Chi-Square

- **Power of Test**
  Stat > Power and Sample Size > 1 – Sample Z